

Patent Application No. 10/755,716  
Art. Unit: 2617  
Amendments to the Claims  
Dated July 17, 2009  
Reply to Office Action of July 06, 2009.

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**Amendments to the Claims**

**Listing of Claims**

**Claim 1. (Canceled).**

**Claim 2. (Canceled).**

**Claim 3. (Canceled).**

**Claim 4 (Canceled).**

**Claim 5 (Canceled).**

**Claim 6. (Canceled).**

**Claim 7 (Currently amended).** A method for transmitting and receiving the data with low BER in the presence of interference in a ~~duplex-mode~~ wireless communication, where in the presence of a group of more than two Subscriber Stations (SS), ~~duplex-mode~~ transmission can take place between any one SS to another SS on one to one basis, comprising the steps of:

assigning to each SS its own identification code Unique Address Code

(UAC) and its own Encoded Information Group (EIG) and two frequencies f1

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and f2 to transmit and receive data, where the EIG is comprised of a sequence of regularly interchanging "1" and "0" bits with different durations;

tuning the transmitter and receiver of the Subscriber Station A (SS A) to the UAC and EIG of the Subscriber Station B (SS B) when SS A attempts to connect to SS B;

tuning the SS A's receiver to frequencies f1 and f2, when the SS A attempts to detect the availability of the UAC of the SS B in the incoming signal, if the UAC of SS B is available, then SS B is considered to be busy;

blocking the SS A's own transmitter and receiver's registering device at the SS A, to disable SS A receiving data from SS B, which is not intended for SS A, and similarly to not transmit data to SS B, when SS B is busy;

tuning the SS A's transmitter over to f1, and the SS A's receiver to f2, when SS B becomes free as detected by the absence of the SS B's UAC in the incoming signal;

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converting each "1" bit of data to be transmitted to the SS B into a SS B's

EIG at the SS A's transmitter;

framing and grouping the SS B's UAC and data at the SS A's

transmitter, in a sequence of successive frames, wherein the duration of each

frame in the signal is constant;

modulating the said frames on the frequency  $f_1$  to initiate a wireless

communication using one of various types of modulation PSK or FSK, or ASK;

transmitting the said modulated frames by SS A's transmitter;

generating at the SS B's receiver an internal Reference Signal (RS) that

corresponds to the SS B's UAC, whereby such RS matches and is a copy of the

SS B's UAC, and therefore counting at the SS B's receiver the Number of

Continuous Clock Rate Periods (NCCRP) that the RS continually matches

with the incoming signal;

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synchronizing the SS B's receiver and transmitter with the SS A's transmitter, when the number of NCCRP exceeds the Threshold Value of Matches (TVM) number where the TVM number is pre-assigned in the SS B's receiver;

measuring at the SS B's receiver the Voltage Hops of the level of the incoming signal at the starting and ending points of the "0" and "1" bits of the EIG, having established that the SS B's receiver and the SS A's transmitter are synchronized and thereby the SS B's receiver knowing at what instances the data bits are to be found, and accordingly;

recovering at the SS B's receiver the data transmitted by the SS A's transmitter from measured values of Voltage Hops by following the rises and drops that takes place at the start and end points of all the "0" and "1" bits in the received signal;

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converting each "1" bit of data to be transmitted to the SS A into a SS B's

EIG at the SS B's transmitter;

framing and grouping the SS B's UAC and data in a sequence of  
successive frames, wherein the duration of each frame in the signal is the  
same as the SS A's frames durations;

modulating the said frames on the frequency f2 at the SS B's transmitter;

~~to initiate a wireless communication using one of various types of modulation~~

~~PSK or FSK, or ASK;~~

transmitting the said modulated frames by SS B's transmitter. ~~receiving~~

~~the SS B's UAC by SS A's receiver implies that a direct communication between~~

~~SS A and SS B now possible and enabled, thereby enabling the data exchange.~~

**Claim 8 (Canceled).**

**Claim 9 (Canceled).**

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**Claim 10 (Currently amended).** A method for transmitting and receiving the data,  
~~at the duplex mode wireless communication~~ as claimed in claim 7, further  
comprising the steps of:

measuring at the SS A's receiver the amount of the time delay of the  
received UAC signal regarding UAC signal transmitted by SS A;

computing the distance between subscribers stations A and B from the said  
measured amount of the time delay between UAC signals transmitted and received  
by SS A.

**Claim 11 (Currently amended).** A method for transmitting and receiving the  
data, ~~at the duplex mode wireless communication~~, as claimed in claim 7,  
further comprising of:

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transmitting simultaneously and intentionally a strong interference along  
  
with the data, to maintain the security of the transmission, consequently preserving  
  
the confidentiality of the transferred data.

Respectfully submitted,



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